

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: "Anderson, Craig - Ext. 1365" <CAnderso@smtp.stp.tec.mn.us>  
Subject: 51S1 escutcheon needed  
Message-ID: <32BEE7D4@smtp.stp.tec.mn.us>

Need a 51S1 front dial escutcheon, anyone have one or know where I could get one?

Craig, K0AZB

canderso@win.bright.net  
1-800-715-6046

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: Randy Zelick <h2rz@odin.cc.pdx.edu>  
Subject: AM bandwidth  
Message-ID: <Pine.PTX.3.95.961223110126.13078F-100000@odin.cc.pdx.edu>

Hi folks,

I was just looking back in time with the "Pocket Guide to Collins..." and it struck me that well within the AM era receiver bandwidths were spec'ed at 4-5 kHz rather than 6 kHz. This is true for the Collins, but also true for the Drake 2B and 4-series.

Later in the sideband era the Collins spec changed - my 51S-1 has a 6 kHz position for AM.

One interpretation was that as improved filter technology (xtal and mechanical) provided more selectivity the "nominal" 4-5 kHz (which was always really 6-7 kHz) became too tight. Still, this does not make much marketing sense to me. If you want a 6 kHz filter for AM, you should call it 6 kHz even if it is not quite right.

Another possibility is that AM signals were narrower in the old days. Perhaps the ham stuff was always narrower than SWBC, and both the 75A-series Collins and the Drakes, which were specifically for ham use, specified a narrower bandwidth. Contrary to this interpretation is the R-388/51J-3, which also has a less-than-6-kHz bandwidth spec and was not made for the ham market.

Finally, it may be that the radios mentioned really date from a "crowded-AM" pre-SSB era when the market wanted the best adjacent channel selectivity without making the AM unuseable.

With a really strong signal my R4A sounds very nice on AM (also because of Drakes super AGC) but all the high frequencies are absent. So too are adjacent channel heterodynes, making a reasonable compromise if you are only going to have one AM bandwidth.

Does anyone know the real reason?

Cheers,

=Randy=

R. Zelick  
Dept. Biology  
Portland State University  
P.O. Box 751  
Portland, OR 97207  
503-725-3086, 503-725-3888 (fax)

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: Tom Norris <badger@telalink.net>  
Subject: Re: BA Christmas Miracle Wanted  
Message-ID: <2.2.32.19961223173256.006861ac@telalink.net>

At 11:26 AM 12/23/96 -0600, you wrote:

>  
>Somewhere there must be the legendary lost cover graveyard with millions of  
>lost covers just lying around. (it's probably near the NOS 1L6 graveyard)  
>

No doubt right next to the pit with all the R-390 covers behind the warehouse of still-crated BC-348's and BC-610's.

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: TEK0CH@aol.com  
Subject: BA's for Sale  
Message-ID: <961223124258\_1821175608@emout15.mail.aol.com>

I have the following equipment for sale. All are in good operating condition and unmodified, and include original manuals in most cases.

Globe King 500-A/Globe VF0, near mint condx (9) - \$800.00 pick-up only.  
Viking II and matching 122 VF0 - ( 7) \$300.00 plus shipping  
Ranger II -(8) \$300.00 - plus shipping

HR0-50T1/matching speaker, near mint (9) 7 coils in box - \$450.00 - plus shipping  
DX-100-B perfect mint condx (10) \$350.00 plus shipping  
DX-100-B parts rig complete except for case and tubes. \$75.00 plus shipping.  
Galaxy V Mk.2/P/S speaker (9) \$250.00 plus shipping.

I can send digital pictures of all of the above mentioned equipment if needed!

You can hear these on the air or come and operate them yourself if you are in the Atlanta area. I would prefer local pick-up so you can be assured of the their condition and operation.

Thomas E. Koch - W4UOC  
8170 Habersham Waters Road  
Dunwoody, GA 30350  
tekoch@aol.com  
(770) 730-8136

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: Terry Burge <terrybu@netman.ENS.TEK.COM>  
Subject: Re: BA/Swap nets??  
Message-ID: <9612231957.AA17124@netman.ENS.TEK.COM>

Joe and the list,  
A couple of on air swap meets are 7240 12:30 PST Saturday and Sunday and 3915 9:30 or so Sundays.

Terry  
KI7M

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: "Lon W. Cottingham" <k5jv@swweb.net>  
Subject: BC-1004 Name plate  
Message-ID: <199612230234.UAA14562@uro.theporch.com>

Still looking for a name plate for BC-1004. Will pay bucks.

73 de Lon W. Cottingham, K5JV  
1110 Golden Bear Ln.  
Kingwood, TX 77339  
713-358-4207 713-358-4234 FAX

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996

From: Jacqueline Herman <jherman@sierra.net>  
Subject: Cheapest transmitter?  
Message-ID: <Pine.SUN.3.91.961222183057.23284B-1000000@diamond.sierra.net>

Someone asked about the smallest xmtr ever made. While perusing the ads in my '61 ARRL Handbook, I think I've found the cheapest xmtr ever offered: Ameco AC-1 Novice CW xmtr, for \$19.95. It was an 80/40m 15W xtal rig, included the PS, and used a 6V6 osc., and 6X5 rect. Extra coil for the other band was 75 cents.

For the "sweatest rig" in the ads I've vote for the Viking Navigator (EF Johnson Co.): 40W CW, VFO, 160-10m, 6146 final, all for \$149.

Both the above rigs were kits.

I love reading the ads in these older Handbooks! I've also got the '50 edition; if anyone needs specs or prices on a particular rig from these periods, let me know and I'll look it up.

73 from snowy Nevada (missing Hawaii very much),  
Jeff KH2PZ / 7 (ignore the name in the header; I'm using my mom's account)

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: k7yha@juno.com (Richard H. Arland)  
Subject: Christmas Gift  
Message-ID: <19961223.221208.6551.12.k7yha@juno.com>

Gang:

First of all, Merry Christmas and Happy New Year to everyone.

A good friend and QRP Buddy, Fran Slavinski, KA3WTF, just presented me with a year's subscription to Electric Radio magazine. What a GREAT gift. No joke, Electric Radio is a great radio read. If you haven't made up your mind about this magazine, take my word for it, Electric Radio is great value for money.

73 rich K7SZ

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: k7yha@juno.com (Richard H. Arland)  
Subject: Collins Collector's Calendar  
Message-ID: <19961223.053541.6551.5.k7yha@juno.com>

Gang:

I received the ordering info for the 1997 Collins Collector's Calendar in the mail about a month ago. I dutifully gave it to my YL who managed to lose it...BEFORE she ordered my calendar. Anybody got the phone number for me to place a phone order for one of these puppies?

Help!

73 es MX

rich K7SZ

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: dfrancis@access.usa.net (Dexter Francis)  
Subject: Re: Collins Mechanical Filters  
Message-ID: <v01520d00aee4a29169a0@[207.0.57.74]>

The December 1996 issue of RF Design has an advertisement on page 61 for "Collins Bandpass Mechanical Filters". Center frequencies are available from 100 kHz to 550 kHz and bandwidths from 0.1% to 5%. (At 455 kHz, 0.1% would equate to 455 hz) The photo shows what appears to be a thru hole mounted IC sized can with 22 pins. They are produced by the Filter Products division of Rockwell, in Costa Mesa, CA. (714) 641-5315.

While we're on the Subject of RF Design, there was an article in the January 1996 issue titled:  
"Build a One Tube Regenerative Receiver", written by Mark Starin.

I will attempt to gather more data on both of these items.

-df

\* CWest Tube Sales \*  
"Have Tubes, Will Haggle"  
P.O. Box 22443 SLC, UT 84122  
(801) 363-TUBE voice/fax  
e-mail: tubes@usa.net

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: "Rhett T. George" <rtg@ee.duke.edu>  
Subject: DeJUR  
Message-ID: <199612231654.LAA94488@ee.duke.edu>

- Greetings -

At the local ham association Christmas party, I was the happy recipient of a "Ruggedized" DeJUR voltmeter, no doubt associated with a boatanchor. The main meter scale is 50-0-50 V with a secondary 0-100 V scale from center to right. The main band is green for 10-0-10 V and red for 50-10 and 10-50 V. None of the voltages are marked with minus signs. I am leading up to the question that has me stumped. What equipment might have used it? There is a 0.001 uF ceramic across the terminals and the nub of an uninsulated coax which must have connected it to - - ?

Guesses along with positive ID's are most welcome. Many thanks and Merry Christmas (or other salutation appropriate to your custom).

73 Rhett George - KE4HIH

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: "Bob Duckworth" <wb4mnf@atl.org>  
Subject: EANCO 77BS21 power supply info sought.  
Message-ID: <199612231215.HAA01747@atl.org>

These appear to be power supplies.  
They also appear to be SS but look like they might be good for running 28V mil gear. I've tried web/usenet search with altavista and it looks like EANCO manufactures aircraft components based on a listing I found of AC parts.

Does anyone here know anything more about them?

Thanks and 73 for the holidays.

-bob  
wb4mnf@atl.org

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: Michael Crestohl <mc@shore.net>  
Subject: FREEBIES!!!  
Message-ID: <199612231115.GAA08386@northshore.shore.net>

Hello Everyone:

In the spirit of the season I have several items that I want to find new homes for and will give to someone who can use them. All I ask is that

you cover the postage or UPS.

1. Nixie tube digital display. This uses pencil-type Nixie tubes.
2. Some kind of precision potentiometer - multi-turn! Was attached to a S-line tuning knob (which I snagged).

This stuff comes from a remote tuning unit. Inside is full of sand-state stuff. plug-in boards that have all kinds of components. I stripped the pots and switches, Teflon wire harness and other bits, but the plug-in boards are also available and will be included with the freebies above.

Rules of Ware apply.

The Rules of Ware:

Winners will be determined by:

- 1) Tell me why you need/want them, points awarded for:
  - a) Repairing or building a firebottle, or VSS rig.
  - b) Needing them to complete a project.
  - c) Buying for someone your "Elmer-ing"
  - d) For old manuals/documents owning the radio or whatever.
  - e) \*Making up an outrageous story of what you will use them for. :-)

\* For item "d" the taller and more unbelievable the better...

2) Bonus points to anyone who has sent me a manual, helped me find a part, or provided advice, (good or bad, it's the effort that counts. :-) or sold me something at a reasonable price.

3) Double bonus points to anyone who has posted thoughtful technical comments to one of the lists recently. (For sale and WTB ads do get old.)

Winners will be determined any darn way I feel like.

Judges decision is final. (Although open to bribes :-)

Thanks Larry for codifying the above procedure.....

\	__/\__	/	73 de H Michael Crestohl, W1RC, (also VE2XZ)
*	/	\	
\		/	Caretaker of "Boatanchors", Military, Gov't and
			"Spy" Radio Receiving and Transmitting Equipment.
- * -		- * -	Trade offers always entertained!
			Internet: mc@shore.net, W1RC@amsat.org, W1RC@usa.net
/		\	AX,25: none at the present

\* |-----| \*  
/ \-----/ \  
| | | |

QTH: Cambridge Village, Vermont, 05444, U S A  
at the foot of Mount Mansfield, highest elevation  
in Vermont; 225 miles from Boston, 90 from Montreal.

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996

From: Ho4bart@aol.com

Subject: FS: ARA 1f rec, ARC-12 1f rec, "code training set" GSC-1T

Message-ID: <961223063722\_1121553143@emout20.mail.aol.com>

ara 190-550 rec, untested, front adaptor has one screw-adjust pot, looks  
contemporaneous but probably a modification \$25 ?

arc type 12 rec same freq range, this type has no dial, intended for remote  
control  
only, same size as above, your offer?

apx-2 iff transceiver, has NAS Seattle maint logo on it dated 1961, yes i  
know  
no one wants this as it has absolutely no use & isn't out of the collectible  
era, but  
i have to try. and it having survived so far & not being real common,  
deserves to live.  
your offer or trade for ???

AN/GSC-1T code training set, an audio gen, variable tone or flashing light  
in a  
very rugged wood armored trunk abt 20 x 12 x 12, with 4 remaining keys of  
orig  
10 ( no i didn't sell them off, someone else). i would think this would  
appeal to some  
telegraph/ cw / keys enthusiast, looks really neat (anyway i think so)  
\$ 110

some power tubes 829 or 832, can't recall, out of scr-522 xmtr, with sockets,  
basically free for shipping.

always 1st pref given to some interesting trade for mil or aircraft or  
fishing vessel  
type radio ( except the 60s cb-looking ones ) or manuals for any such.

gonset vhf mobile converter, 2m, same style as others in this line, your low  
reasonable offer?



mcmurdo silver 800 superregen 2m rec, needs ext p/s, looks good but untested, with manual, unusual, your offer?

i also have vac tube cb manuals.....swap for solidstate manuals or sams cb series

over #200

audio output xfrmr for USN RCH receiver ( Scott), NIB \$10 shipped.

& i do not want to sell anything to outside USA.....or to anyone who is into doing

"conversions" &

at risk of further bandwidth waste, my apologies to anyone else i greatly annoyed with my comments on smoking. all true, but not for this venue.

hue miller

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996

From: Tom.Daley@530.gigo.com (Tom Daley)

Subject: fs: more stuff

Message-ID: <e44\_9612221809@gigo.com>

hello ba people the following items are for sale or trade.

i am looking for gonsets ! dont be shy with offers

1. sonar fm40 fm (25-50mhz) transceiver. looks like tube cb radio but fm in xtal control. unit is complete and in fair shape speaker grill pushed in (easy repair) restore for ham fm on 29.6 or 52.525 mhz. in 40 mhz range now. untested \$25
2. clegg zeus 6 meter am/cw transmitter good condition under dust. no modulator/power supply ! good front panel with all knobs meter etc ok ! case top fair case bottem missing (sheet metal) with manual copy ! with extra pa tube ! untested ! \$50
3. icm (international crystal) "exec" 12ch tube cb transceiver fair/good condx under nicotine tinge. with mic and power cord dymo lable "whiskey bill" proudly displayed !! untested \$20
4. polycom sr23 23ch tube cb transceiver in good condx under dust no mic includes mic plug. w/power cord & sams copy untested \$25

all above plus shipping thanks 73 tom in sacramento

--

: Fidonet: Tom Daley 1:203/530 .. speaking for only myself.

: Internet: Tom.Daley@530.gigo.com

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996

From: Robert Fowle <hammarlund@jacksonmi.com>

Subject: FS: Tube books & Transformer books  
Message-ID: <32BED08D.BD5@jacksonmi.com>

Hi All!

today have the following to find new homes for:

RCA                    plus shipping  
TT-5 rebound complete \$20  
RC-16 rebound complete \$20  
RC-19 rebound complete \$20  
RC-21 rebound complete \$20  
RC-25 rebound complete \$25  
RC-26 original complete \$30

Taylor Tubes 1937 product catalog Nice \$25  
Sylvania 1955 Technical Manual like new \$20  
Arrow 1962 catalog used 2 pages missing \$10 shipped  
Stancore S-101 1955 \$20  
Stancore S-104 1958 \$20  
UTC unknown loose pages no cover \$20

Thordarson  
cat. # 400-D fall-winter 1939/1940 Complete xfmr cat. \$25  
cat. # 352-F 1941 replacement xfmr cat. \$25  
cat. # 342-A 1935 servicemans guide \$25  
cat. # 400-FX 1942, will include war-time suppl. \$25  
cat. # 341 fall 1935 replacement xfmr's 4 pg's \$15  
cat. # 400-X (? 1941 ?) complete xfmr cat. \$25

thats it for now...

--

\*\*\*\* Visit my Web Page.....\*\*\*\*

=====]-[->

Robert Fowle            KC8DBC  
1215 Winifred  
Jackson, Mich. 49202-1946  
Ph. 517-789-6721  
E-mail: hammarlund@jacksonmi.com  
Web Page: <http://www.jacksonmi.com/hammarlund>

NOW... BOATANCHORS Conference!  
talk, buy-sell-trade all in one place!  
Moderator: Robert Fowle  
at: <http://www.inetnc.com/hamchat/>

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: Bill Coleman WF2A <wf2awdc@ibm.net>  
Subject: fwd: SP-600 Repainting?

Message-ID: <BMSMTP8513970550wf2awdc@pop03.ny.us.ibm.net>

I'll jump on Jeff's questions too... My restoration is abt 90% complete electrically and it's time for a paint job. Funny tho, my front panel has plenty of chips on the edges from rack mounting and dragging about assorted garage floors - but no evidence of a red primer.

To all that hang around the BA reflector: HAPPY HOLIDAYS!!

73 de Bill WF2A

From: jeffa@ix.netcom.com (Jeff Anderson), on 12/23/96 07:06 PM:

My recently purchased SP-600 panel needs repainting (the paint and red undercoat beneath it are severely worn away along the sides of the front panel). What's the best way to go about repainting a front panel? Does anyone perform this service?

Thanks,

- Jeff, WA6AHL

-----  
Bill Coleman (WF2A)  
-----

Email: wf2a@ibm.net

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996

From: gamrunrr1@juno.com (joe d spanker)

Subject: HOHOHOHOHOHO!!! Collins 32v-3 for xmas!

Message-ID: <19961223.065501.9590.2.gamrunrr1@juno.com>

Merry Xmas All!!!

I have a request for all you Collins Gurus out here! I've found a 32V-3 in reasonable condition, Not real beat up but does show its age, Now I'm not New to BA's but This will be my first Collins purchase! It is supposed to work 100%?? Asking Price is \$200.00 is this a reasonable price? It seems to be, but as stated not real well informed when it comes to Collins! What are strengths/weaknesses of this TX? any cautions or concerns? I understand from the seller that it was in use till about 1 month ago. Any Known modifications or improvements to consider on this TX? Any restoration Tips?

Thanks and again Happy Holidays!!!

Also, I have 3 requests for the Ultra Modulation system info, Will get the Article to everyone right after Xmas!!

73, HOHOHOTOYALL may the red suited gent bring you the long sought after BA of your Dreams!

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: "Allan Fritsche" <fritsche@msn.com>  
Subject: Holliday Cheer  
Message-ID: <UPMAIL03.199612240049430456@msn.com>

Hi Gang, just wanted to let everyone know that I wish them a most pleasant Christmas and a Happy new year.  
Ive been on this list for about a year and a half and have found it informative, met new friends, learned a Heck of alot from the gang.

To all of yours. God Bless  
Your Friend Al  
fritsche@msn.com

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: Bill Myers <bmyers@destin.nfds.net>  
Subject: HW-7/8/9 Info  
Message-ID: <1.5.4.16.19961223081626.1e6f08d0@destin.nfds.net>

Hi All,

I'm looking for any information, especially mods/improvements, on the HW-7/8/9's. I made this request on another list it produced references to a few older publications which I am looking for, but little else. The original Hot Water Handbook is really hard to find so far. I do have the HW-8 Handbook, it has some good info. I plan to add a page on my homepage exclusively for the HW-7/8/9 series with information and modifications.

I did receive a number of requests for passing the info I receive on to other HW-7/8 owners. To those, I will as I get it. Maybe there is enough interest to start a HW-7/8/9 reflector?????

I know they don't use firebottles, but they are classics and I know a lot of firebottle owners than have them.

73's and Merry Christmas to ALL

--

Bill Myers      KK4KF      Grid - EM60rk  
FISTS#2390    QRP-L#755    ARCI#9282    scQRP#42    CQC#386  
Snail Mail      P. O. Box 178    Shalimar, FL 32579  
e-mail          <bmyers@destin.nfds.net>  
homepage <http://destin.nfds.net/~bmyers/>  
                 (Reptiles/Emergency Services/Amateur Radio)  
CHECK OUT THE FISTS INTERNATIONAL CW CLUB U. S. HOMEPAGE  
<http://n9nvv.qrp.com/~fists>    (That's N 9 N V V)

From boatanchors@theporch.com    Mon Dec 23 12:42:19 1996  
From: K1EL@aol.com  
Subject: HW101 Crystal Filter Part 2  
Message-ID: <961222210734\_1222179899@emout17.mail.aol.com>

Well I decided to pull the filter out of the HW101 and check the passband. I hooked it up on the test bench and properly terminated the input and output ports at 2K ohm and swept it across the passband range.

Odd results: A main peak at 3394 with a very minor peak at 3395.6. Almost no response at the design freq of 3395 KHz. This agrees with the way the radio operates so it looks like a new filter is required.

I was under the impression that crystal lattice filters were fairly robust and didn't often fail. And being hermetically sealed I would expect them to be stable. But then this was a 'brand new' filter and may never have been functionally correct. I suppose Heath may have cut a few corners on quality specs to get them at a lower cost. Remember those days when all you had to do was send in the little pink Heath parts ordering envelope and they would send you a replacement part gratis ? :)

73 Steve K1EL

From boatanchors@theporch.com    Mon Dec 23 12:42:19 1996  
From: "Pentti Haka" <pha@mikrolog.fi>  
Subject: HW101 Crystal Filter Question  
Message-ID: <MAILQUEUE-101.961223102943.256@osku.mikrolog.fi>

Steve wrote:

>It's almost there but one thing has got me stuck. The receive passband  
>is skewed by about 2 KHz. In lower sideband peak response is at zero  
>beat and on upper peak is at 3.2 KHz. My first guess was the carrier  
>oscillators, but they are dead on frequency. This leads me to believe  
>that the problem is in the crystal filter. Anyone have any experience

>is this area... I mean how likely is it that the filter is defective ?

I built a HW-32 in 1970 or 1971, to be used as an exciter and receiver for my 2 meter setup (I was in technician class at that time).

The kit had two incorrect components: one of the RF transformers was not the correct one and the crystal filter had three crystals on the other frequency and one crystal on the other (was supposed to have two crystals on each frequency).

As spare parts were difficult to obtain, I corrected the transformer by adding some capacitance. The crystal filter was more difficult: the passband was completely screwed up by one crystal being on the wrong frequency. I finally left one pair of crystals out of the filter. Opposite sideband rejection with this two-crystal filter probably was only in the order of 25-30 dB, but it did not matter much on two meters.

It looks like your crystal filter is defective. I do not know if the HW-101 has a filter built of "discrete" crystals or a monolithic filter. If the crystals are separate, you could check their frequencies in the BFO, using a frequency counter.

----- Pentti Haka -----  
----- OH2TC -----  
-- Pentti.Haka@Mikrolog.fi --

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: Morris Odell <morriso@vifp.monash.edu.au>  
Subject: Re: Info on "official" BC-221 power supply  
Message-ID: <32BE075F.5416@vifp.monash.edu.au>

Hi Hans and fellow listmembers,

>  
> recently my attentio was caught by a For Sale message of a BC-221  
> heterodyne frequency meter that was allegedly in mint shape \*and\*  
> included a built-in AC power supply, type RA-133-B. I've never heard  
> of this PS, but as I have a very nice BC-221 myself I'd like to  
> either buy such a PS or build as close a copy of it as possible. My  
> original BC-221 manual has nothing on this PS, so I'd appreciate any  
> documentation on this unit.

My BC221-AK was built by someone called CPR in 1945, and reconditioned here on Oz in 1957. It looks and smells wonderful and conicidentally I was just using it last week and can report it works well too. The spare tubes in the back of the cabinet will remain there for some time I would

think.

The power supply in the bottom compartment of the case looks like it was made in Australia. It is a dual AC or 6 volt vibrator supply which has 2 input leads wired to a rectangular Jones plug arranged with jumpers so the correct mode of operation is selected depending on whether the AC or battery lead is plugged in. The transformer (very well labelled) is potted in a rectangular can and has dual windings for AC or 6 volt vibrator input. The rectifier is a 6X4. I've always run it on AC and haven't even tried it on DC even though the lead is packed in there.

Incidentally, I have a question regarding the BC221. I was using mine yesterday to listen to a 10 MHZ signal. I found that listening in the "crystal" position didn't give as loud a beat note as using the VFO. I had to calibrate the VFO to the crystal first (very nice loud beat note) and then use it with my signal in the "operate" position. Is this normal? If so, what is the "crystal" position for on the function switch?

Merry Christmas to you all,

Morris

-----  
Morris Odell                                      Victorian Institute of Forensic Medicine  
Forensic Physician                                      57-83 Kavanagh St, Southbank 3006  
morriso@vifp.monash.edu.au                                      Victoria,  
Australia

Web page: <http://www.vifp.monash.edu.au/CFM/staff/mo.html>  
-----

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: jproc@bellglobal.com  
Subject: Re: Info on "official" BC-221 power supply  
Message-ID: <Chameleon.4.01.2.961223211255.jproc@>

Morris

According to my manual, The crystal circuit has two functions:

- "a) a standard frequency reference against which to test the variable frequency oscillating test circuit.
- b) as a source of 1000 kilocycle or its harmonics to be radiated from the antenna".

In other words, a) calibrates the dial; b) Implies that that the 'mixing' must be done externally, not internally which may explain the difference in the signal level you are hearing.

As for the RA133 power supply, I've never seen one fleamarkets but I do have one in a BC221 aboard ship. Prior to this, I made my own BC221 battery eliminator which only takes up half of the available volume in the battery compartment. Using a transformer with a 90 volt output, apply the AC across a bridge made with 1N4007's diodes. Employ a capacitor input filter. Power the filaments from a 6.3V ac 1 to 1.5 amp filament transformer. Before everone jumps all over me for not providing regulation and the DC purity of a battery, just remember that I have outlined a very basic and simple circuit which produces very low amounts of heat. This is ideally suited to the unventilated battery compartment of a BC 221.

Regards,

-----  
Jerry Proc VE3FAB  
E-mail: jproc@bellglobal.com  
Radio Restoration Volunteer  
HMCS Haida Naval Museum  
Toronto, Ontario  
-----

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: Robert Switzer <rs2@mink.mt.att.com>  
Subject: Info Wanted On RCA RX5  
Message-ID: <32BE9D8D.58F0@mink.mt.att.com>

I am going to get a radio from a friend. On the bottom it is identified as an RCA RX5. The cabinet is painted red. The front panel has a dial window, with three unmarked knobs: volume, tuning, and ????. The speaker is mounted on the back of the set, with a grill cloth through a rough two-cutout opening. The sides of the radio are \*rounded\* so that from the top the view of the radio would be:

-----  
(\_\_\_\_)

Does anyone have a schematic and/or any other information on this receiver? I'm sure it's a shortwave rcvr, but of unknown age.

Thanks,  
Robert S.



--

Robert Switzer | rs2@mink.mt.att.com  
KA2CZU

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: john roccaro <jroccaro@chesco.com>  
Subject: Knobs  
Message-ID: <32BF1B4D.5B0F@chesco.com>

Ok, so I'm nuts. But I need a knob for my first rig, a Globe HG-303. It's the "function" or "meter" switch knob (they are identical and I have one of them. Now I don't expect people who collect things that have real value to even know what one looks like, but you may have this little treasure in you junk box somewhere. It's light gray and is in the shape of a cylinder 3/8" wide and 5/8" long. The "shaft" it fits on is a rectangular "blade" which is 3/16" high and 1/16" wide. The receiving channel in the back of the knob is in the shape of a cross so it can accept the bladelike shaft at 90 degree intervals. Season's Greetings (if appropriate to you) & 73. KN3I

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: "William B. Ross" <billross@txdirect.net>  
Subject: Known BA Sale  
Message-ID: <32BE03EA.44BD@txdirect.net>

FYI the San Antonio Swap Fest is scheduled for Sat 11 January. This fest usually features many BAs as San Antonio is the home of the regional Defense Supply Sale yards.

Bill Ross K5LLK

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>  
Subject: Manual Needed: Harrison 6209A 0-320VDC, 0-120mA regulated power  
Message-ID: <v03007802aee3acccd70b@[134.53.65.12]>

Anybody got a manual for the above power supply? I picked one up cheap (I mean REAL cheap) to use for reforming electrolytics and as a BA bench supply. The voltage regulator part works great, but the current -limiting circuit is kaput. To fix it I'm going to need a manual, or at least a circuit diagram. Anybody else got one of these units???

Jim W8ZR

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: Steve Bertsch <sbertsch@x1.us.ohio-state.edu>  
Subject: Meissner ANALYST  
Message-ID: <199612231839.MAA09584@uro.theporch.com>

A Meissner ANALYST followed me home from the monthly junk swap yesterday. It's (from memory) about 15"H x 10"W and 26 lb., with black crinkle paint. It's divided into four sections, vertically. The top section is a DC meter, the two middle sections are signal generators, and the bottom has an AC outlet and some means of detecting current draw. Each section has it's own electron-ray (tuning-eye) tube. Yep, four of 'em. There are a total of 11 bright red pointer knobs, two 3-band dials for the generators, and numerous input and output jacks. It's purty.

I suspect this thing was a one-box solution to the test equipment needs of radio shops in bygone days; my limited collection of magazines dates it to at least pre-50s.

Anyone know more about this beast?

- Steve N8KWV

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: Ronnie Hull <larebel@ms1.nwla.com>  
Subject: Merry Christmas!  
Message-ID: <1.5.4.16.19961223144855.194f32c4@ms1.nwla.com>

to all my good friends in boatanchor land. My god bless each of you and your families in the coming year, and may your boatanchor discoveries be plentiful!!

Ronnie Hull - W5SUM  
Shreveport, La

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: Ho4bart@aol.com  
Subject: more comment on bypass capacitor life  
Message-ID: <961223052212\_236700247@emout14.mail.aol.com>

the ones that really amaze me are in some of the ww2 surplus radio equip.

i've seen these things change their max voltage over the decades so that they operate as kind of a HV zener. my friend has a bc-639 vhf receiver, up to a certain moderate b+ joltage it played fine, but up to rated voltage and the cap started spewing, back off the b+ and the sets plays fine again. i've seen the same thing in the bc 312 rx. rumor had it that these condensers were fashioned from pressed camel dung.  
hue miller

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: gpewitt@execpc.com  
Subject: More neat stuff in stash  
Message-ID: <Chameleon.961223132210.gpewitt@execpc.com.execpc.com>

I found a Tek 585A scope with the following plug-ins:  
53/54G  
53/54K  
AN 1841/USM 2 ea.  
and

a 1L30 Spectrum analyzer 925 M to 10.5 Gig

all look very good.  
Any interest?

What would be a fair price for this rig?

-----  
Name: Gary Pewitt N9ZSV/KT  
6120 W. Calumet Rd. Apt 204  
Milwaukee, WI 53223  
414 355 8147 Home 414 297 4307 Work  
E-mail: gpewitt@execpc.com  
From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: EdKB2NSP@aol.com  
Subject: need NC-300 knob  
Message-ID: <961223004633\_2019437500@emout20.mail.aol.com>

Greetings Anchor Afficionados !

I'm missing the BAND selector knob for an NC-300 that is in otherwise very nice shape. I have a carcass with other parts available, but it's a cosmetic nightmare !

Season's greetings and my best wishes to all ! I'm new to the BA list,

and I really like what I've seen so far !

Ed K. in Ocean City, NJ

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996

From: KB9VU@aol.com

Subject: New BA in the shack! (Yes Veronica...there IS a Santa Claus!)

Message-ID: <961222225621\_1721278835@emout07.mail.aol.com>

Hi all fellow BA'ers. Christmas has come a little early here!

Just picked up a Central Electronics 100V transmitter today. Had to drive to Springfield to get it from the owner. 6 plus hours of driving but hey, it was for a good cause! The case has some surface rust but not bad. The front panel is almost perfect. The insides are a tad dirty but no corrosion.

Missing the cover from the PA compartment (anybody got a spare) and the fan that attaches to the Power Transformer (spares anyone?). The TX has been in storeage for 3+ years but with some care as it was kept warm and in a heavy plastic bag. The seller even had a good copy of the manual to go with it.

Great guy too. We met at the Bass Pro shop in Springfield. Sunny, 65 degrees and more shoppers than parking spaces. Lucky we got there early!

Tonight I hooked up the variac and brought it up to full voltage over the space of an hour or so. NO SMOKE and all the tubes lit. Musty smell gave way to the scent of "WARM T000BS" after about 40minutes. WOW! What a nice piece of work! Manufacture date was 1959. Forgot to check the SN. My year long search has really paid off. Not as nice cosmetically as Mikes, K0AZ, but I'm happy as a pig in the mud with it!

Anyone on the BA list with some pointers, advice, cautions, Etc. regarding this great old TX? Sure would appreciate any input there is out there.

More later as I get into the clean-up and further testing.

73 de Mike, KB9VU

Happy Holidays to all the BA members from St. Louis, MO!

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996

From: Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>

Subject: Re: New BA in the shack! (Yes Veronica...there IS a Santa Claus!)

Message-ID: <v03007801aee3a934fef1@[134.53.65.12]>

Hi Mike,

Congrats on the 100V. I restored one about a year ago, but moved to a new

QTH before I ever got a chance to use it on the air. You've prompted me to haul it off the shelf and lug it over to the operating table. Assuming I can find room on the operating table.

Re the power supply fan, most users simply removed the fan. I don't think it's really needed. Mine came with the fan loose in a bag, and I didn't install it. The left side of the 100V doesn't run that warm. It's the right side that needs the help!

Re pointers: When you pull the chassis out of the cabinet, check to see if the power supply caps have been replaced. If not, you might consider changing them. If you can't find twist loc electrolytics, I'd leave the old ones in place and wire in some under-the-chassis modern ones to do the filtering. Then you wouldn't have to worry about a power supply failure causing other damage.

You'll probably want to disassemble the planetary vernier and lubricate it. Also, you might want to take out the PTO (not a difficult job) and replace the styrafoam liner inside the enclosure. It will have rotted by now, and the frequency stability will suffer and the little pieces can gum up the drive screw. It takes about an hour to get it apart, replace the styrafoam and reassemble it. Alignment of the PTO is great fun, using a freq counter. It's a very slick design.

It's also not a bad time to start rounding up spares. The CRT can be purchased new from Fair Radio Sales for under \$15. If you're adventuresome, you can buy some new Svetlana 6550Bs and see how they work in the 100V. I'm doing for someone else to check them out for me! Speaking of tubes, check the bias on the PA driver tube to make sure its correct (off-line and in transmit). There's a bypass cap the frequently shorts and causes the tube to run way too hot. It runs very hot normally, but when the cap shorts it runs REALLY hot.

Also, I'd suggest you go through the alignment procedure. It isn't terribly complicated, and the results will warrant the effort. You should easily get 100W output, with inaudible carrier and reasonably good sideband suppression. Aligning the rig is also an opportunity to check out all the vox and control circuits, the clipper (which probably needs a battery replacement), and to see how many scratchy pots you've got. DeOxit works wonders on the pots and the zillion section bandswitch. I'd be amazed if the radio is fully functional. It's just too complex for something not to be wrong.

In any case, Santa was definitely good to you this year. You'll really like the 100V!

73,

Jim W8ZR

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: Chuck Penson <penon@sci.mus.mn.us>  
Subject: Off line for a week  
Message-ID: <32BEED1F.68A5@sci.mus.mn.us>

A note to let you all know that I will have the list in the "suspend" mode for a week while I am out of town.

Just so none of you get any ideas, the dobermans will be watching that shack while I'm gone ;)

73, seasons greetings, and I'll see you all next year!

--

Chuck Penson  
WA7ZZE

penon@sci.mus.mn.us  
612.221.4510 voice  
612.224.5092 fax  
<http://comped.sci.mus.mn.us>

Standard Disclaimer: The opinions expressed are etc. etc. ...

"Nothing is too wonderful to be true" -- Michael Faraday

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: NavRad41@aol.com  
Subject: R-390A ID Tags available  
Message-ID: <961223111029\_1955380176@emout19.mail.aol.com>

Hi Gang,

I have the following R-390A ID tags available.

I'm in need of one R-390 ID tag.  
I wish to trade one R-390A ID tag for a R-390 tag.

1. Collins order no. 8719-P-55 serial no. 2234
2. Collins order no. 8719-P-55 serial no. 4757

3. Motorola order no. 14-PH-56 serial no. 1246 this tag is different in size from the other tags. 7/8" h x 3"w (same size as R-390 tag)

4. Electronic Ass. Corp. order no. FR-36-039-N-6-00189(E) serial no.480

5. Electronic Ass. Corp. order no. FR-36-039-N-6-00189(E) serial no. 5658

Contact:

Steve Finelli N3NNG  
37 Stonecroft Dr.  
Easton, Pa. 18045  
610-252-8211

Merry Christmas to all,  
Steve  
NavRad41@aol.com

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: Karl Verren <kn6cw@hughes.net>  
Subject: R390 3TF7 Problem solved  
Message-ID: <19961223053317.AAA13121@[205.139.35.227]>

Greetings to all,  
Firstly, I would like to thank all those who provide guidance toward the solution of a 3TF7 replacement and secondly I would like to share my end solution to the problem.  
After considering all the suggestions I devised a homebrew replacement. I wired 4 T1 3/4 lamp sockets in parallel to a 9 pin plug which fits into the RT510 socket on the IF deck. I then screwed 4 T1 3/4 lamps into the sockets which performs the same duty as the ballast tube. Each lamp operates on 12 volts @ 75ma., therefore 4 lamps in parallel operate at 12 volts @ 300ma. which closely resembles the 3TF7's characteristics.  
After assembly and installation, the R390 returned to it's normal operation and showed no sign filament problems on either the BFO or the VFO.  
Karl Verren KN6CW  
2894 Delmar Ave.  
Mojave,CA.93501-1114

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: dave metz <metzd@cfw.com>  
Subject: R390 Final list  
Message-ID: <2.2.32.19961224000447.006fb6ac@milo.cfw.com>

After all is said and done it looks as if we have 31 NON A units out there on the BA list.

Bill Sorsby <bill.sorsby@dlepl.itg.ti.com>	1- Collins
Dave Adams <adamscan@netgate.net>	1 Motorola
Michael Tallent <mtallent@concentric.net>	1 Collins
KA9EGW@aol.com	1 Collins
Gary Taylor <wb8bem@hiwaay.net>	1 Collins
gpewitt@execpc.com	unknown--no name tag
Dave Metz metzd@cfw.com	3, (2 Collins, 1 Motorola)
'dgibbs@rational.com'" <dgibbs@rational.com>	1-Collins
ken brookner, n5lpi brooknerk@acm.org	1 unknown(not at qth)
"Herb Holeman" <choleman@ptialaska.net>	1 Collins
Radiomatt@aol.com	2- make not disclosed
BRIDGERS@gonzo.ccl.org	2 Collins, 2 motorola,1 Motorola f/Collins
knudsen@gvmail.ih.lucent.com	1 Motorola
"Herb Holeman" <choleman@ptialaska.net>	1 Collins
Randy Zelick <h2rz@odin.cc.pdx.edu>	1 not the best of shape
"Benjamin D. Hall" <BDHall@ghgcorp.com>	1-collins
JPevner@aol.com	1Motorola
DArney@gnn.com	1 make -not indicated
John Poulton <jp@cs.unc.edu>	1- no tag , unknown mfg
don merz <71333.144@CompuServe.COM	1- Collins
Richard Post <POST@ouvaxa.cats.ohiou.edu>	1- Collins
mail08458@pop.net (Bryan)	1 Collins
knaack@wsu.edu (Charles Knaack)	1 Collins
NavRad41@aol.com	2- 1 Motorola 1 Unknown no tag

Variation: R391 AutoTune version

Andy Howard, WA4KCY" <102452.362@CompuServe.COM>  
Dennis Gibbs  
Dean Davidson <ddavidso@metz.une.edu.au> 1- Collins unit

In closing this thread down, I appreciate all who responded and hopefully as new units jump into unsuspecting vehicles the new owners will file this one away and know that there are enough units out there to solve the different problems that exist with this 95 lb heavyweight.

Next project: the hybrid R1051B's (hey, it has TWO tubes!) but I'll have to wait till after the first of the year to float that one and see how many there are on this auspicious group.

May you find peace, happiness and good health this holiday season.

73's dave



From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: "Anderson, Craig - Ext. 1365" <CAnderso@smtp.stp.tec.mn.us>  
Subject: R390A fuse  
Message-ID: <32BEE940@smtp.stp.tec.mn.us>

I know that the later R390A receivers added an extra fuse on the back panel.  
It is a 1/8th AMP slowblow. Recently, I turned on my late production (1968  
EAC) and nothing. I checked all the fuses as a first step and found that  
the 1/8th AMP fuse was open. Why was this fuse added later in the  
production of R390A's and what is it for?

The only modification done to the radio was by Miltronix when it was rebuilt  
and the ballast tube was taken out and replaced by a large finned precision  
resistor.

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: pmills@A.crl.com (Phil Mills)  
Subject: Re: R390A fuse  
Message-ID: <199612232247.AA07620@A.crl.com>

>  
>I know that the later R390A receivers added an extra fuse on the back panel.  
> It is a 1/8th AMP slowblow. Recently, I turned on my late production (1968  
>EAC) and nothing. I checked all the fuses as a first step and found that  
>the 1/8th AMP fuse was open. Why was this fuse added later in the  
>production of R390A's and what is it for?

If it is like my R390A, it is a fuse in the B+ line....my R390A has  
2 fuses in 2 different B+ lines. I would guess that they provide  
extra protection for the rectifiers while waiting for the AC line  
fuse to decide to blow.

73, Phil

.  
Phil Mills, AB5TH                   \*\*\*\*\*       \*\*\*\*\*

pmills@a.crl.com  
281-992-5762 days  
Friendswood, TX (south of Houston)

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: "Jack Giehl" <jackg@one.net>  
Subject: Re: R390A IF alignment question??  
Message-ID: <199612230513.AAA03665@one.net>

Dear BA Enthusiasts,

Phil Mills asked about stagger tuning IF transformers T501, T502, and T503 in an R-390A. Stagger tuning the transformers will let you hear high frequency audio when using the 8 and 16 KC IF positions. Both of my 390a's are set up that way, and listening to broadcast and ham stations with full fidelity is indeed a pleasure.

Jack

=====  
Jack, WB8BFS  
jackg@one.net Loveland, Ohio (near Cincinnati)  
=====

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: Morris Odell <morriso@vifp.monash.edu.au>  
Subject: Re: R390A IF alignment question??  
Message-ID: <32BEFA85.5C31@vifp.monash.edu.au>

Hi all,

Phil Mills wrote:

>  
> Regarding alignment of the 455 kc IF, the tech manual  
> says "IF transformers T501, T502, and T503 are stagger  
> tuned in some models and all are tuned to 455 k.c. in  
> other models." How do I figure out which I should do  
> on my unit? Does it make a big difference?

My R390A manual only refers to peaking these transformers with no mention of stagger tuning. (It's an Australian Post Office "Engineering Instruction" which is essentially a copy of the original manual edited by the locals here). I wonder if anyone could let me know what the procedure is for stagger tuning them - it might be interesting to see if

there is a difference.

73

Morris VK3DOC  
morriso@vifp.monash.edu.au

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: pmills@A.crl.com (Phil Mills)  
Subject: Re: R390A IF alignment question??  
Message-ID: <199612240058.AA13194@A.crl.com>

>  
>My R390A manual only refers to peaking these transformers with no  
>mention of stagger tuning. (It's an Australian Post Office "Engineering  
>Instruction" which is essentially a copy of the original manual edited  
>by the locals here). I wonder if anyone could let me know what the  
>procedure is for stagger tuning them - it might be interesting to see if  
>there is a difference.

Morris, my manual is not handy right now so I'll give you a better answer later...but the long and short of it is that you tune one IF transformer to 467 kc, another set to 438 kc, and another set to 455 kc. I think this spread is much too large and plan to stagger tune about 6 kc either side of 455 kc. I'll send you the actual manual wording tomorrow so you'll know which transformers are adjusted to which...

73, Phil

.  
Phil Mills, AB5TH                   \*\*\*\*\*       \*\*\*\*\*  
pmills@a.crl.com  
281-992-5762   days  
Friendswood, TX       (south of Houston)

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: pmills@A.crl.com (Phil Mills)  
Subject: R390A mechanical filter circuits  
Message-ID: <199612232248.AA07627@A.crl.com>

I'm in the process of going through and checking out and aligning the IF deck from my R390A, primarily because the BFO was off frequency by about 2 or 3 kc and the mechanical filters did not appear to have much affect. I pulled the cover from the mechanical filters and noted that the 8 and 16kc filters are Collins but that

the 2 and 4 kc filters are "brand-x"...some outfit I've never heard of before. So somewhere along the line, 2 of these filters have been replaced, and, apparently in that process, all the mica caps on top of the filters were changed to 15 pf even though the schematic shows 110 pf and the alignment text says that a range of values between 51 and 110 pf should be tried to see which gives the best output. The tech manual also shows a modified version which uses trimmer caps across the mica caps to give a tuning adjustment....that is, both the input and output ends of each mechanical filter have a fixed mica in parallel with a ceramic trimmer across it. Has anyone ever "updated" an R390A in this way and if so what was your experience? Any comments from anyone on the advisability of doing this mod?

thanks & 73,  
Phil

.  
Phil Mills, AB5TH                   \*\*\*\*\*       \*\*\*\*\*  
pmills@a.crl.com  
281-992-5762   days  
Friendswood, TX       (south of Houston)

From boatanchors@theporch.com   Mon Dec 23 12:42:19 1996  
From: dma@IslandNet.com  
Subject: R390As at Electronic Dimensions  
Message-ID: <m0vcEE8-0006bFC@mail>

I was in Electronic Dimensions in Tacoma yesterday and noticed that there were two R390As for sale. I didn't ask the price (the owner was busy and I was trying to outrun a snow storm!).

One is a Capehart and the other a Collins. Both have meters. One is in a cabinet, so I couldn't see it's inside condition. The other looked pretty clean, but I couldn't see too much without shifting a bunch of other stuff. The power supply rectifiers were either missing or had been replaced by silicon diodes. Both have a "hard used" front panel look. I suspect this pair was part of a diversity setup, as they have some rear panel oddities.

If I were in the market, and if I could get a good price (don't bet on it at ED!) I'd say a couple of pretty good restoration projects.

Jan Skirrow, VE7DJX  
dma@islandnet.com  
Duncan, British Columbia

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: Randy Zelick <h2rz@odin.cc.pdx.edu>  
Subject: R390meter summary  
Message-ID: <Pine.PTX.3.95.961223100716.13078C-100000@odin.cc.pdx.edu>

To the meter curious,

Well the results from my inquiry about replacement R390 meters were all over the map!! I had very definitive comments suggesting that it does not matter much and just about any 1 mA meter will work, to other very well reasoned comments about two issues which create problems. One is meter "sensitivity" and the other is "impedance", the latter being the term used by Rick Mish.

Interestingly, my understanding of ammeters was that they were really voltmeters with internal or external shunts and that the shunt was a very low, nominal resistance. But it looks like many ammeters, presumably those made for specific applications like the R390, have particular internal resistances which are matched to the source impedance of the driving circuit.

So a 1 mA meter which has, for example, a 0.5 ohm internal resistance would load the R390 circuit too much. Instead you need 18 ohms, according to one comment.

Now several people responded that they have had good luck using generic replacement meters, so my guess is that the R390 1 mA meter is close to a common value and there is a good chance of finding something that works.

It seems like a simple bridge circuit could be used to compare an authentic R390 meter with generic replacement meters. Hopefully someone will get some of Dave Ross' meters and find out if these are a good choice.

Thanks to all who responded.

Cheers,

=Randy=

R. Zelick  
Dept. Biology  
Portland State University  
P.O. Box 751  
Portland, OR 97207  
503-725-3086, 503-725-3888 (fax)

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: Richard Hager <rhager@millcomm.com>  
Subject: Re: R390meter summary  
Message-ID: <32BEEF1F.2FE5@millcomm.com>

Randy said...

> my understanding of ammeters was that they were really  
> voltmeters with internal or external shunts and that the shunt--

As far as I know, all standard DC meters are -current- meters, not voltmeters. It is -current- flowing in a coil that produces magnetic field, not voltage. That field interacts with the magnetic field of the meter's 'stator' to produce a deflection.

Because of the high internal impedance of some meters, they would 'act' like voltmeters, since it would require a certain voltage across their impedance to produce the necessary current flow.

In regards to the R390 meters, I don't see any reason why a more sensitive movement couldn't be used with a resistive shunt to 'approximate' the original meter. That is, use a 100ua meter, plus a resistor shunt, or divider, to get the desired result. However, this would require knowledge of the original meter's characteristics.

Also a note on VU meters: There is a term known as the 'ballistics' of the meter, which describes its dynamic response. It may be a little tougher to replicate the ballistics of the original meter, however this too can be done with external R/C/Diode circuits. Scott Robinson probably knows much more about this than I do. I know it exists, but not how to accomplish it.

Best of luck making this all work. \$70 per meter for originals sounds really frightening to me!

Richard

Richard Hager

+ Ah-ha! Design Group, Inc. -  
+ Precision CNC Technology, since 1991 -  
+ 612-641-1797, Fax: 612-641-8681 -  
+ "I just like to make things" So... -  
+ ...please call Ah-ha! directly for CNC info -  
+ <http://www.millcomm.com/~ahha> email: [ahha@millcomm.com](mailto:ahha@millcomm.com) -

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: John Kolb <jlkolb@cts.com>  
Subject: Re: R390meter summary  
Message-ID: <Pine.SCO.3.91.961223164451.12491A-100000@sd.cts.com>

On Mon, 23 Dec 1996, Randy Zelick wrote:

> Interestingly, my understanding of ammeters was that they were really  
> voltmeters with internal or external shunts and that the shunt was a very  
> low, nominal resistance. But it looks like many ammeters, presumeably >

Actually, it's the other way around. the meter is responding to the amount of current through the coil to generate a specific movement. A series resistor is used to turn a milliammeter into a voltmeter. A (10 kohm - meter resistance) in series with the meter would turn a 1 mA meter into a 10 Volt (full scale) meter. A 100 Kohm would turn it into a 100 V meter. Low resistance shunts are placed in parallel with a milliamper meter to make it read a higher current. If the above 1 mA example meter has a 10 ohm coil, a 1.111 ohm resistor in parallel would make the combination meter read full scale when 10 mA flows through the terminals.

Now a mA meter is a voltmeter in a sense.  $E=IR$ . If you know the current flowing through through the 10 ohm meter movement, you also know the voltage across the meter. You could say the example meter is a 10 milliVolt meter, but if I had 10 mV to measure, placing a 10 ohm resistor across the 10 mV would likly short it out in most cases. To measure 10 mV, a 50 microamp meter in series with 200 ohms (if my math is correct) would make a voltmeter that would load the voltage source much less.

> So a 1 mA meter which has, for example, a 0.5 ohm internal resistance >  
> would load the R390 circuit too much. Instead you need 18 ohms, according  
> to one comment. > >

A 1 mA meter sould work in this circuit if a 17.5 ohm resistor was placed in series with it. You cannot, however, place a resistor in parallel with a high resistance 1 mA meter to bring the resistance down to 18 ohms - the R-390 circuit would be happy, but most of the current would flow through the shunt resistor instead the meter movement, so you would get very little meter deflection.

Have we beat up this subject enough, or have I just confused it?

John

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: Dgnova@aol.com  
Subject: recone  
Message-ID: <961223122226\_676642042@emout07.mail.aol.com>

I had incorrectly listed their telephone number earlier. I have since found their correct telephone number and verified that they still recone speakers. They did a great job on a 1935 GE radio speaker for me. Scavenger sound inc recones laudspeakers. Their address and telephone number is:  
Scavenger Sound Inc  
Telephone 410-761-1072  
550 Crane highway North  
unit 25  
Glen Burnie Maryland 21061

Philip McCoy dgnova@aol.com

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: John Poulton <jp@cs.unc.edu>  
Subject: RG-Trivia  
Message-ID: <199612232233.RAA00970@mira.cs.unc.edu>

A trivia question for the august assembly: what was the origin of the "RG" in the naming of coaxial cables? AND, is there a rhyme or reason to the numbering scheme? Oh, yeah: and what the heck are the "A's", "U's", and "A/U's"??

Any help would be greatly appreciated--am working on an engineering textbook, and it seems worthwhile to pass on these little bits of nickel knowledge to students of the art...

Cheers!  
John Poulton  
jp@cs.unc.edu

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: Bob Roach <KE4QOK@worldnet.att.net>  
Subject: Seasons Greetings



Message-ID: <19961223145747.AAA3092@LOCALNAME>

Merry Christmas to you and yours and a very prosperous New Year.

73 es TNX

KE4QOK                Real radios glow in the dark.

Bob                Power is no substitute for skill.

                  If it stayed up last winter, it was too small.

136 Hermitage Rd.

Newport News, Va. 23606 KE4QOK@worldnet.att.net    [try here first]

(757)930-0348        bob.roach@sourcebbs.com

From boatanchors@theporch.com   Mon Dec 23 20:22:56 1996

From: RIlowite@aol.com

Subject: Re: Seasons Greetings

Message-ID: <961223161832\_2019521753@emout04.mail.aol.com>

Bob:

Happy holidays to you and yours Bob.

You say.

<Real radios glow in the dark.

I agree.

<Power is no substitute for skill.

I agree.

< If it stayed up all winter, it was too small.

Here I disagree, Bob, I'ts not too small and I'm extremely frustrated.

73   Ralph (W2GKG)

From boatanchors@theporch.com   Mon Dec 23 20:22:56 1996

From: jeffa@ix.netcom.com (Jeff Anderson)

Subject: SP-600 Repainting?

Message-ID: <199612232230.0AA26705@dfw-ix2.ix.netcom.com>

My recently purchased SP-600 panel needs repainting (the paint and red undercoat beneath it are severely worn away along the sides of the front panel). What's the best way to go about repainting a front panel? Does anyone perform this service?

Thanks,

- Jeff, WA6AHL

From boatanchors@theporch.com   Mon Dec 23 12:42:19 1996

From: Claudio Marchesini <cmar@datamat.it>  
Subject: SR-204 tech doc  
Message-ID: <199612231041.AA13070@relay.iunet.it>

Hi gang,  
I recently picked up a SR 204 HF transceiver made by Scientific Radio System, Rochester N.Y..  
The shape's equipment is like a Drake TR7, it's channelized (six channels) over 1.6 to 30 Mc/s, fully solid-state (sigh!), except final P.A. wich is TUBES (two, like 6HF5). The receiver section has two Collins mechanical filters in IF. I'm looking for maintenance manual.  
Does any one out in BA land, have a technical documentation with schematic diagrams or any helpful suggestions?  
Thanks in advance.

73's Claudio.

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      //\\  
      (#  #)  
:-----o00-( )-00o-----:  
:      Claudio Marchesini      :  
:      DATAMAT S.p.A.          :  
:      Via Laurentina, 760      :  
:      00143 ROMA - ITALY      :  
:                               :  
:      cmar@datamat.it         :  
:      Voice:39-6-50274240      :  
:      Fax:39-6-5020333         :  
:-----:                     :
```

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: n5off@w5ddl.aara.org  
Subject: Thanks for 51J-3 Data  
Message-ID: <536870@w5ddl.aara.org>

Thanks all for the R-388/51J-3 data.

I was able to get two high s.n.'s from that post.

Still looking for civilian 51J-3 data. I got one comment that Collins never made a 51J-3 as such, just 51J and 51J-4. I had to disagree with that as I have a Collins manual right here for the 51J-3.

73 de tom

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: joelutz@juno.com (Joseph W Lutz)  
Subject: Re: Thanks for 51J-3 Data  
Message-ID: <19961224.012016.2878.1.JOELUTZ@juno.com>

Tom,

Correct you are. The 51J-3 (per the Pocket Guide to Collins ...  
46-80) confirms that this receiver is best known by the military  
designation of R388. Moore's 3rd edition on Commo Rcvrs lists the 51J-3  
mfgd 50-51 and the J-4 52-62. It gives electrical description and tube  
compliment. Good luck.

73 de JOE

- - - - -W7LPF/4 (NNN0KU0)- - - - -  
- - -

QWCA - NCVA - SOWP - FISTS  
Gordonsville, Va 22942 (Orange County)  
WTB: EFJ Adventurer, Hallicrafter HT32

- - - - -  
- - - - -

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: "JOSE V.GAVILA (EB5AGV)" <eb5agv@ctv.es>  
Subject: Triplet 3444 tubetester info?  
Message-ID: <199612232113.VAA21892@sandra.ctv.es>

Hello BA world!

Last June I got a nice Triplet 3444 tubetester. I've found it very useful  
and I like a lot its careful and robust construction. My only complaint is  
that it has not some 'new' tube sockets, as compactrons. I know there were  
some socket adaptors for it. Of course, I'm pretty sure I won't find one  
(Santa, are you there?... can you listen me???), but I hope to find somebody  
who could pass me the schematics of such an adaptor. The idea is to build  
myself one (I have got all the sockets). Evidently the schematic should be  
very simple, but I wonder how do they connect a 12 pin compactron to an 8  
pin octal (I think this was the system used to connect the adaptors). I  
suppose some of the pins could be configured to suit the needs of a  
particular tube but, how?.

Perhaps although not for my tester, some of you could tell me in general,  
how Hickock or others did these adaptors, so I could guess how to do mine.

Well, hope this question is not out of topic!.

Best wishes for all of you, BA fans, in this Christmas!. I hope Santa bring you lots of BA 'junk' ;-)

-----  
73 JOSE V. GAVILA (EB5AGV / EC5AAU)  
Valencia - SPAIN

http : //www.geocities.com/SiliconValley/6992  
e-mail: eb5agv@ctv.es  
eb5agv@amsat.org

\*\*\*\*\*  
\*\*\* WANTED: SX-101A, SX-88, SX-115, SX-42 \*\*\*  
\*\*\*\*\*  
-----

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: gamrunrr1@juno.com (joe d spanker)  
Subject: Ultra Modulation System  
Message-ID: <19961222.075313.10302.0.gamrunrr1@juno.com>

Happy Holidays!! Recently I saw a post by someone regarding Ultra Modulation, A request for info, I beleive. Well I just located my reference to this, it was published in QST, October of 1956. The article goes into theory and construction, its three pages long. If anyone needs a copy of this let me know.

73, and HO, HO, HO! to Y'all

From boatanchors@theporch.com Mon Dec 23 12:42:19 1996  
From: "Chuck (Jack) Hawley" <c-hawley@uiuc.edu>  
Subject: Re: Ultra Modulation System  
Message-ID: <32BE1271.5B83@uiuc.edu>

joe d spanker wrote:

>

> Happy Holidays!! Recently I saw a post by someone regarding Ultra  
> Modulation, A request for info, I beleive. Well I just located my  
> reference to this, it was published in QST, October of 1956. The  
> article goes into theory and construction, its three pages long. If  
> anyone needs a copy of this let me know.

>  
> 73, and H0, H0, H0! to Y'all

I understand that there is another article in CQ, November 1964. It's supposed to be the best one on that subject.

Chuck, KE9UW

From boatanchors@theporch.com Mon Dec 23 20:22:56 1996  
From: Dgnova@aol.com  
Subject: WE-25  
Message-ID: <961223192512\_1854784009@emout03.mail.aol.com>

--PART.BOUNDARY.0.566.emout03.mail.aol.com.851387112  
Content-ID: <0\_566\_851387112@emout03.mail.aol.com.33360>  
Content-type: text/plain

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--PART.BOUNDARY.0.566.emout03.mail.aol.com.851387112  
Content-ID: <0\_566\_851387112@emout03.mail.aol.com.33361>  
Content-type: text/plain;  
    name="WE.TXT"  
Content-Transfer-Encoding: quoted-printable

For the question asked earlier about the WE-25A transmitter the characteristics are:

=0D

Use: aircraft during the 1930s  
power output 15 watts  
frequency range 2800kc to 6400kc  
6L6 Oscillator  
6L6 power amplifier  
Modulators pair of 6L6s in pushpull  
schematic diagram available  
Philip McCoy dgnova@aol.com

--PART.BOUNDARY.0.566.emout03.mail.aol.com.851387112--